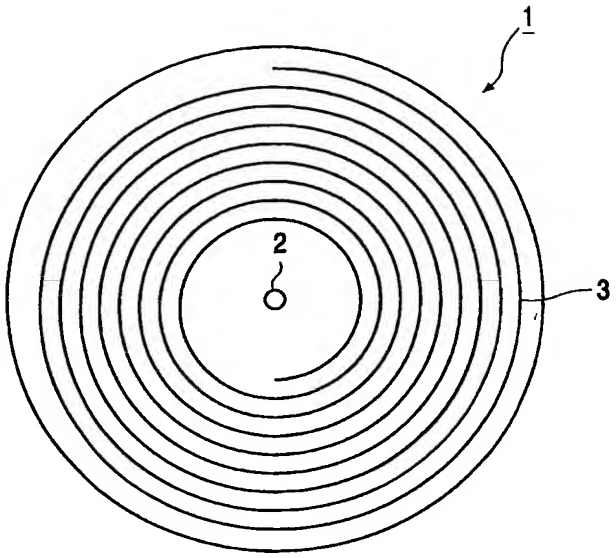
1
2
3

FIG. 1

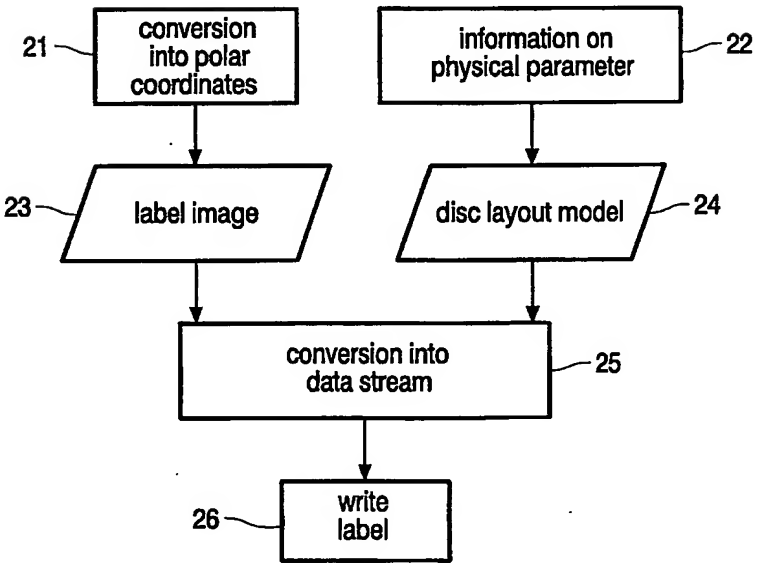
21
conversion into polar coordinates
information on physical parameter
22
23
label image
disc layout model
24
conversion into data stream
25
26
write label

FIG. 2

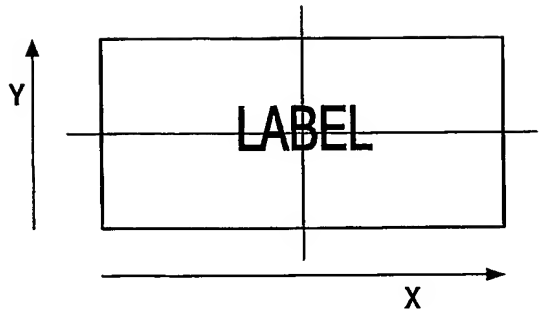

FIG. 3A

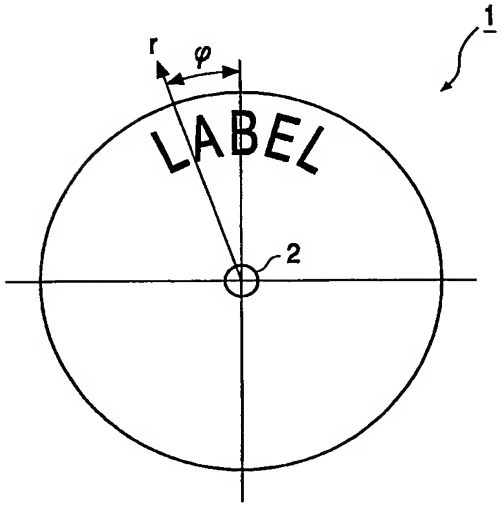

FIG. 3B

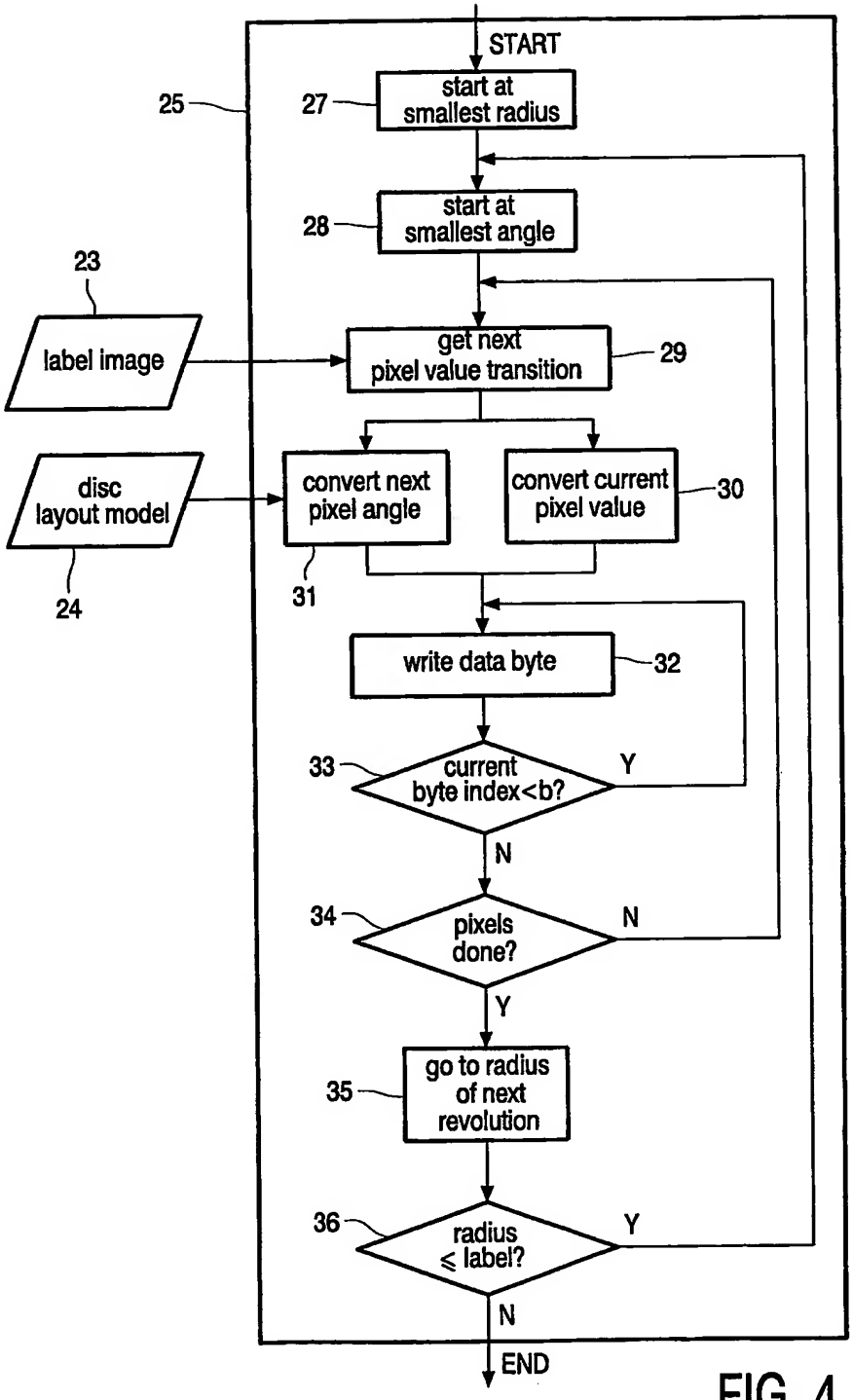
START
25
27
start at smallest radius
28
start at smallest angle
23
label image
get next pixel value transition
29
disc layout model
convert next pixel angle
convert current pixel value
30
24
31
write data byte
32
33
current byte index<b?
Y
N
34
pixels done?
N
Y
35
go to radius of next revolution
36
radius ≤ label?
Y
N
END

FIG. 4

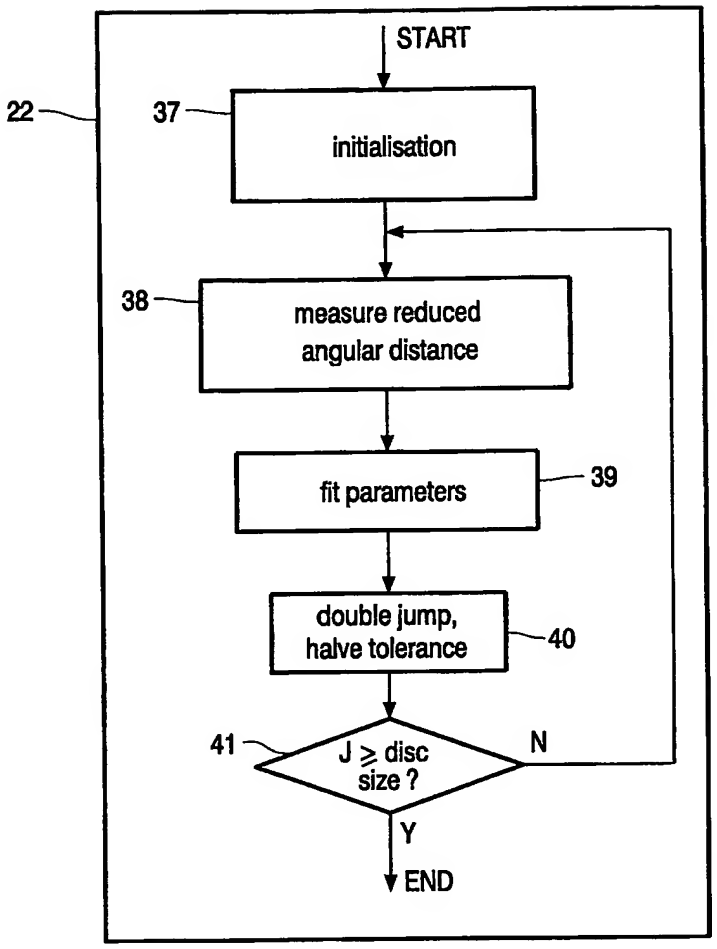
START
22
37
initialisation
38
measure reduced angular distance
fit parameters
39
double jump, halve tolerance
40
41
J ≥ disc size ?
N
Y
END

FIG. 5

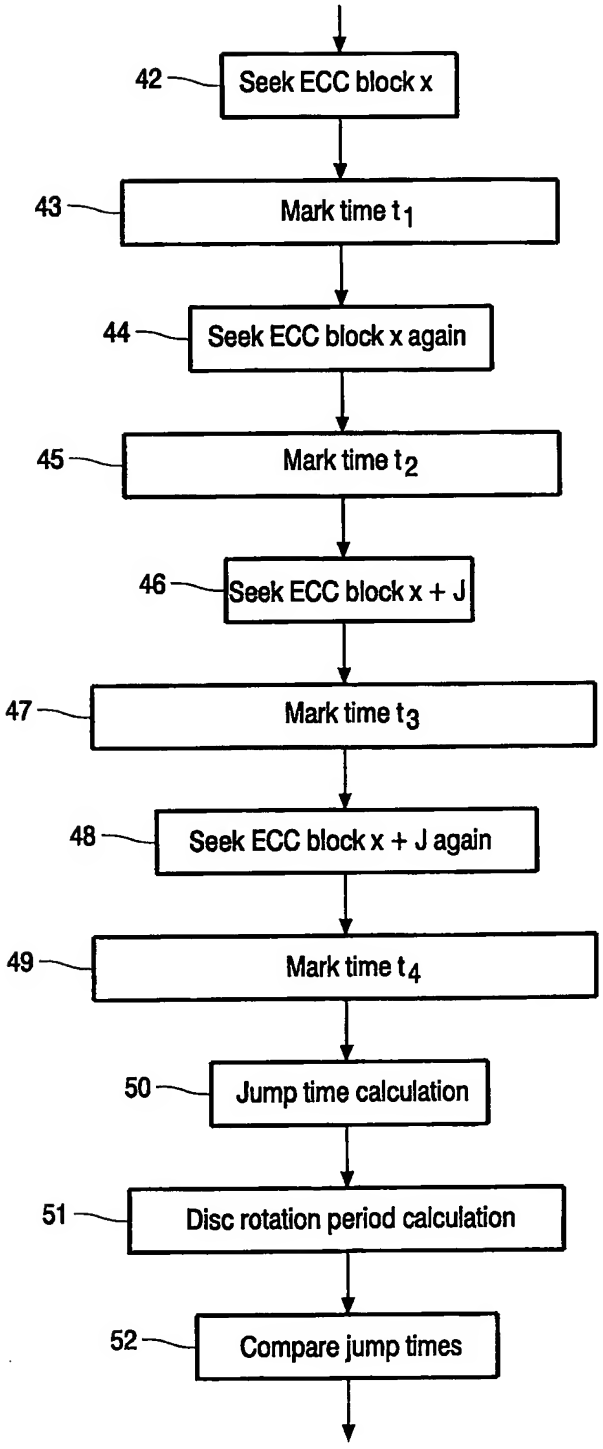
42
Seek ECC block x
43
Mark time t_1
44
Seek ECC block x again
45
Mark time t_2
46
Seek ECC block x + J
47
Mark time t_3
48
Seek ECC block x + J again
49
Mark time t_4
50
Jump time calculation
51
Disc rotation period calculation
52
Compare jump times

FIG. 6

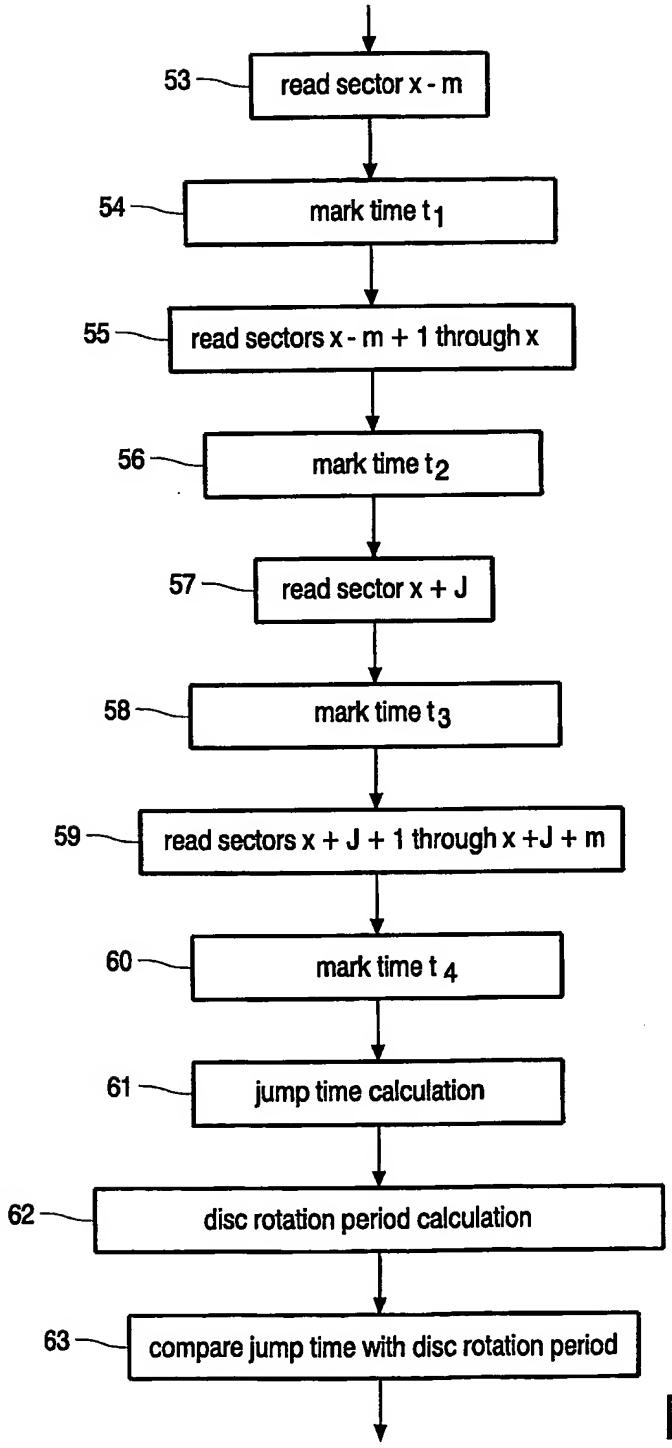
53
read sector x - m
54
mark time t_1
55
read sectors x - m + 1 through x
56
mark time t_2
57
read sector x + J
58
mark time t_3
59
read sectors x + J + 1 through x +J + m
60
mark time t_4
61
jump time calculation
62
disc rotation period calculation
63
compare jump time with disc rotation period

FIG. 7

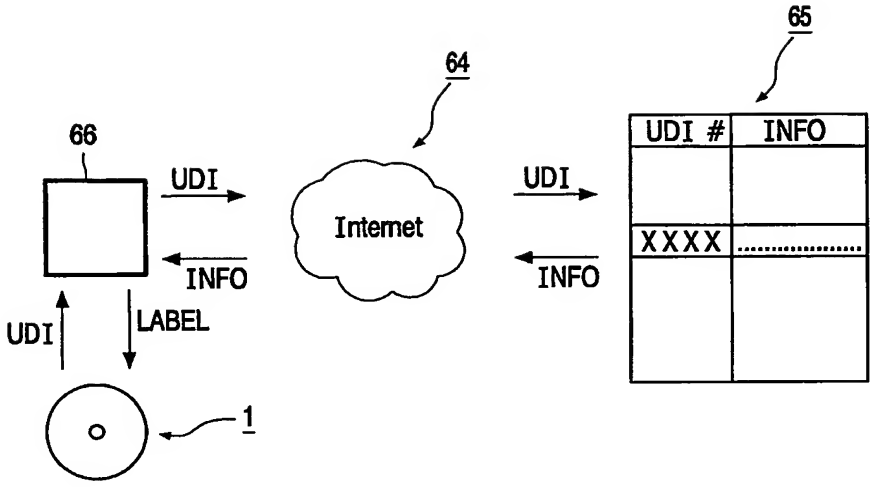

FIG. 8

Parameter	Nominal value	Range	Unit	Remarks
Starting diameter of the Data area D_0	48.0	+ 0.0, - 0.4	mm	
Track pitch D_{tp}	0.74	±0.01	μm	averaged over whole disc
	0.74	±0.03	μm	maximum deviation
Channel bit length L_{cb}	133.3	±1.4	nm	averaged over whole disc

FIG. 9

Parameter	Nominal value	Range	Unit	Remarks
Inner radius R_0	22.0		mm	start of groove tracks, start of Lead-in
	24.0	+ 0.0, - 0.2	mm	first address in Information/Data Zone
Track pitch D_{tp}	0.74	±0.01	μm	averaged over the Information Zone
	0.74	±0.03	μm	maximum deviation
Channel bit length L_{cb}	133.3	±1.4	nm	averaged channel bit lenght over each RUN

FIG. 10